

ABSTRACT

A method of attaching unmodified biopolymers, particularly, unmodified polynucleotides, directly to a solid support is provided. The method includes the steps of (a) providing unmodified biopolymers; (b) providing a solid support having at least one surface comprising pendant acyl fluoride functionalities; and (c) contacting the unmodified biopolymers with the solid support under a condition sufficient for allowing the attachment of the biopolymers to the solid support. The unmodified biopolymers may be nucleic acids, polypeptides, proteins, carbohydrates, lipids and analogues thereof. The unmodified polynucleotides may be DNA, RNA or synthesized oligonucleotides. The DNA may be single or double stranded. A device including a solid support and unmodified biopolymers attached to the solid support by reaction with the pendant acyl fluoride functionalities of the solid support is also provided. The methods and devices of the present invention may be used in performing hybridization assays and immunoassays.